### REMARKS

I. <u>Independent Claims 1, 18, 35, 51, 78, 94, 121, and 137, and Associated Dependent Claims – 35 U.S.C. 103 Rejection – Silverman '082 Modified By Kulkosky Article</u>

Applicant submits that modifying Silverman '082 in the manner proposed in the Office Action would not be appropriate or obvious, for the following reasons:

A. Adding the OMS mentioned in the Kulkosky Article to the Front End of Silverman '082 Would Indeed Disable Silverman's Important Ranking/Filtering Feature.

Modifying Silverman to receive indications of interest or prospective transaction entries via an integrated OMS would disable or at the very least hamper his ranking/filtering feature – an important part of his invention. A modification which renders the prior art unsatisfactory is simply not obvious, as stated in MPEP 2143.01:

"If [the] proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)".

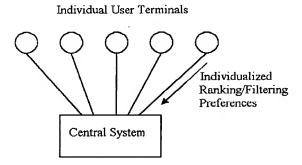
The Office Action states (pages 25-26) that Applicant's argument regarding individualized input of ranking/filtering information is unsound, because OMS users are able to have individual input into an OMS. However, Applicant has never argued that individual input into an OMS was impossible, or that users could not later change the orders that they previously put into the OMS. See the following diagram which shows multiple users individually inputting orders into an OMS. (This diagram was also provided in Amendment C, page 26.)

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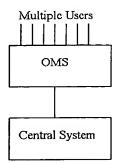
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<u>Silverman '082:</u> A user terminal for each counterparty, which the counterparty uses to input individualized ranking/filtering preferences into the central system.



Silverman '082 with proposed integrated OMS: The OMS blocks receipt of individualized ranking/filtering preferences into the central system.

Applicant's point is different – it is that when you add the OMS mentioned in the Kulkosky article to the front end of Silverman '082, a user may be able to change his orders in the OMS – but he cannot "reach through" the OMS to change information in the matching system, like Silverman's ranking/filtering preferences. Instead, the user can only change information already in the OMS, and Silverman's ranking/filtering feature would be cut off, as any custom feature would be.

The only way to not cut off Silverman's ranking/filtering feature would be to first modify the OMS mentioned in the Kulkosky article to allow the user to input Silverman's unique ranking/filtering information, and then *modify Silverman '082* by adding the modified OMS to it. This would be an involved process (because Silverman's ranking/filtering information has many different aspects to it), and would certainly not be obvious. Not surprisingly, the Kulkosky article contains no mention of such a modification or customization.

Moreover, Silverman '082 has other custom features that would also be cut off if his individual input terminals were replaced by the OMS in the Kulkosky article. As just a few examples, Silverman has a "credit limit entry screen" feature (see Col. 11, lines 32-35 and Figure 3), a "market maker's box" feature (see Col. 12, lines 37-46 and Figure 6), and also displays "help information" and "financial news" on his terminals (see Col. 11, lines 36-38). In fact, Silverman '082 already has a fully developed, highly specific set of individual input screens that are tightly integrated with his system and work together with his custom features (see Figures 3 – 7). All

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these individual input screens would be disabled if the OMS in the Kulkosky article were grafted onto Silverman in place of his individual input terminals.

In sum, Silverman '082 has several important custom features, including but not limited to his ranking/filtering preferences, and already has a highly developed "front end". All of this would be disabled unless the OMS in the Kulkosky article were *itself* modified before grafting it onto Silverman.

In the interview, the Examiner posited that the OMS in the Kulkosky article might not have to be modified to handle input of Silverman's ranking/filtering preferences, because the Kulkosky article mentions that with the Instinet OMS, users can enter lists of orders with "defined trading strategies". However, Kulkosky's mere mention of "defined trading strategies" does not mean that this term covers features as specific and complex as Silverman's ranking/filtering preferences, and that therefore, the Instinet OMS would naturally be pre-configured to handle Silverman's ranking/filtering preferences – and indeed, Silverman's other custom features.

Such an expectation is unrealistic. The Kulkosky article makes no mention that "defined trading strategies" involve anything more than garden-variety price rules (pricing your order passively or aggressively), order slicing (setting order sizes), and order routing (which crossing networks you want to connect to), which OMSs typically handle and which do not even approach the complexity or specificity of Silverman's ranking/filtering and other custom features.

Moreover, an affidavit is attached from Steven Levy, a securities industry and OMS expert who is very familiar with the Instinet OMS mentioned in the Kulkosky article and who has reviewed both the Kulkosky article and the Silverman '082 patent. This affidavit supports Applicant's arguments that: 1) users could not simply enter Silverman's ranking and filtering data into the Instinet OMS without first modifying it to accept and store such data, and 2) the Instinet OMS's "defined trading strategies" do not in any way contemplate or encompass the ranking and filtering features described in Silverman. Please see Exhibits 1 and 2 in the Appendix.

Further, Instinct offers automatic execution systems (it was a pioneer in this area), and thus its OMS would naturally be designed to work with automatic execution trading systems. Such an OMS would not be pre-configured to handle input related to a quintessentially negotiated-system feature like Silverman's ranking/filtering preferences. Silverman's ranking/filtering preferences are all about negotiation – the user uses the filters to determine what matches are presented to him. He reviews these matches, picks the ones he wants, and negotiates with the other party to finalize the deal.

The other trading systems mentioned in the Kulkosky article are also automatic execution systems, as shown by the passages below:

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- "Execution Services Inc...its technology platform allows for order entry, routing, execution, confirmation, and posting without being touched by human hands other than those that key in the trade". See page 2, lines 31-33.
- "Bernard Madoff Securities, for instance, provides an automated trading system".
  See page 3, line 39.

# B. Silverman '082 Teaches Against Having Multiple Users Per Input Path, As Would Happen If the Proposed Modification Were Made.

The Office Action does not address Applicant's argument that Silverman '082 teaches against having multiple users per input path, as would happen if Silverman received indications of interest or prospective transaction entries via an OMS and not via individual terminals. The following excerpts illustrate Silverman's teaching in this regard:

- "[T]he present invention includes a matching computer; a plurality of remote terminals corresponding to a plurality of users, wherein the remote terminals enable the users to enter transaction data and ranking data into the system" Col. 5, lines 35-39.
- "A method of identifying potential counterparties to a transaction according to the present invention includes the steps of receiving ranking data and transaction data from a plurality of remote terminals corresponding to a plurality of counterparties" Col. 5, lines 49-53.

As can be seen, Silverman teaches against having more than one user per input path, by emphasizing in the above passages that the number of input paths (his user terminals) corresponds to the number of users.

#### C. The Above Arguments Are Separately Applicable.

Applicant wishes to point out that any one of the above arguments establishes nonobviousness. In other words, even if the Examiner believes that modifying '082 as proposed would not hamper the important individualized ranking/filtering feature, Silverman's other custom features, or Silverman's already developed, highly specific set of input screens, the proposed modification is still unobvious because Silverman teaches against having more than one user per input path.

And the converse is true as well.

### D. The Kulkosky Article Does Not Disclose The Integration of Differently-Structured Indications of Interest.

The Office Action states on page 4, regarding the Kulkosky article, that "[t]he Order Management Systems disclosed allow for the integration of differently-structured indications of interest"; however, the Office Action provides no citation as to where in the article this discussion is. Applicant submits that nowhere does the Kulkosky article discuss differently-structured indications of interest.

# II. <u>Independent Claims 52, 62, 105, 115, 148, and 158, and Associated Dependent Claims – 35 U.S.C. 103 Rejection – Chou '504 Modified By Silverman '082</u>

Applicant submits that modifying Chou '504 in the manner proposed in the Office Action would not be appropriate or obvious, for the following reasons:

### A. Switching Chou to a Negotiated System Would Render It Unsatisfactory for Its Intended Purpose.

A modification which defeats the intended purpose of the prior art invention is not obvious, as stated in MPEP 2143.01: "If [the] proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F. 2d 900, 221 USPQ 1125 (Fed. Cir. 1984)".

The very purpose of Chou is to save costs and increase confidentiality, and he does this by eliminating the negotiation process that existed in the prior art. In other words, Chou breaks from the previous negotiated systems and moves to an automatic execution system in order to solve the cost and confidentiality problems of negotiated systems. Note the following passages from Chou's Summary of Invention, wherein he cites the problems with negotiated systems that his non-negotiated, automatic execution system overcomes:

"We have discerned that an important drawback of direct negotiation ... is the

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information companies need to inadvertently share or provide to their competitors". See Col. 1, lines 22-26.

- "In sharp contrast, a novel electronic marketplace, which we disclose herein, can enable companies to trade capacity anonymously". See Col. 1, lines 29-31.
- "Another trend that can make the present invention a more attractive alternative to current practices, is driven by technological advances in computer and communications industries". See Col. 1, lines 35-38.
- "Direct negotiations with competitors ... may result in high search costs". These search costs manifest themselves as the time and expense of obtaining the best price". See Col. 1, lines 52-56.
- "Under the new methodology of the present invention, players' search costs can be significantly lower, because it can eliminate the need to establish one-to-one contact". See Col. 1, lines 56-59.

It is clear, from Chou's own specification, that his intended purpose is to save costs and increase confidentiality, and that he accomplishes this purpose by eliminating negotiation – i.e., by changing from a negotiation operating principle to a no-negotiation, automatic execution operating principle. He cites the disadvantages of a negotiated system and touts the advantages of his automatic execution system – advantages that derive directly from eliminating negotiation. Thus it would certainly not be obvious to switch Chou to a negotiated system – that would go completely against Chou's teachings, his intended purpose, and indeed the '504 patent's very reason for being.

1. Switching Chou '504 From a No-Negotiation, Automatic Execution System to a Negotiated System Would Defeat His Intended Purpose of Saving Costs.

It was agreed in the interview that one purpose of Chou was to lower costs by eliminating direct, one-to-one negotiation between contraparties. Clearly, modifying Chou to take out automatic execution and put back in the extra steps necessary for the contraparties to themselves consummate the transaction would add back the very costs that Chou sought to eliminate. Transactions would take longer and cost more to consummate, thus defeating Chou's intended purpose of saving costs.

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2. Switching Chou '504 From a No-Negotiation, Automatic Execution System to a Negotiated System Would Also Defeat His Intended Purpose of Increasing Confidentiality.

The proposed modification would also defeat Chou's intended purpose of increasing confidentiality. The Office Action states correctly that *prior to* the proposed modification, Chou discloses complete confidentiality – but this complete confidentiality is enabled by, and inextricably linked to, the automatic execution nature of his system. When you replace Chou's automatic execution system with a negotiated system, Chou's complete confidentiality is lost.

In other words, the complete confidentiality of Chou's no-negotiation, automatic execution system prior to the proposed modification is destroyed by the modification. Chou provides no inkling of how one might provide for complete confidentiality in a negotiated system – instead, he specifically points out that poor confidentiality is one of the drawbacks of a negotiated system. And neither, of course, does Silverman '082 – because it does not provide for complete confidentiality in *its* negotiated system.

In sum, the Office Action cannot just state that Chou satisfies the complete confidentiality requirement prior to modification, and then bring in something from Silverman '082 that defeats that confidentiality.

With regard to Chou's intended purpose, the Examiner posited during the interview that Chou's use of "can" in the Summary of Invention section, e.g.:

"Under the methodology of the present invention, players' search costs can be significantly lower, because it can eliminate the need to establish one-to-one contact"

and

"[A] novel electronic marketplace, which we disclose herein, can enable companies to trade capacity anonymously"

means that Chou views negotiation vs. automatic execution as a mere design choice – or in other words, that a user can have significantly lower costs and improved anonymity by eliminating negotiation, but might just as easily choose not to have these advantages.

This argument does not make common sense, however. Chou's use of "can" does not indicate that he views the objects of his invention as mere design choices. Rather, Chou uses "can" as purpose language and distinguishing language – he is discussing what his invention can do for users that the prior art cannot. Such purpose and distinguishing language is entirely appropriate for the Summary of Invention section, wherein the inventor states the invention's objects and advantages and distinguishes it versus the prior art. See 37 CFR § 1.73 and MPEP §§ 602(g) & 608.01(d).

Moreover, Chou does not discuss any alternative solution or "design choice" that wouldn't eliminate negotiation and thus wouldn't cut costs or increase confidentiality. Instead, he emphasizes that negotiation systems have important drawbacks that his invention overcomes. Clearly, Chou is not thinking of negotiated systems as an alternative design choice to his nonegotiation, automatic execution system.

### B. No-Negotiation/Automatic Execution is a Basic Operating Principle of Chou '504.

It would not be obvious to modify Chou to switch from no negotiation to negotiation, because no-negotiation/automatic execution is a basic operating principle of Chou, and a proposed modification is unobvious if it alters a basic operating principle.

MPEP 2143.01 states: "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. *In re Ratti*, 270 F. 2d 810, 123 USPQ 349 (CCPA 1959)".

The following passages, among others, in Chou's disclosure make clear that no negotiation/automatic execution is a basic operating principle:

- Chou's deal-making executor is perhaps the key entity in his system, and is discussed throughout the specification and drawing figures.
- "Deal-making executor 26: The deal-making executor takes all the valid (unexecuted) bids and asks submitted by players and finds feasible matched deals ... outcomes are a set of contracts, which include commodity allocations and prices". See Col. 4, lines 7-12 and Figure 3.

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- "Deal device 28: The device receives information on deals executed from the deal-making executor. This device informs buyers and sellers if their bids and asks respectively were executed". See Col. 4, lines 13-16 and Figure 3.
- "Deal database 30: The deals database preferably maintains a record of all trades executed by the deal-making executor". See Col. 4, lines 19-21 and Figure 3.

Switching Chou from an intentionally non-negotiated system to a negotiated system is no minor change — rather, it would involve a major rework of the fundamental structure and central operating principle in Chou. In short, it would require turning this reference on its head, which is surely not obvious.

### C. Moreover, Chou '504 Explicitly Teaches Against the Proposed Modification.

In his Summary of Invention, Chou distinguishes his invention from previous systems that worked by negotiation:

- "Currently, under such conditions, companies often negotiate directly with their competitors to buy and sell capacity. We have discerned that an important drawback of direct negotiations to buy and sell capacity is the information companies need to inadvertently share or provide to their competitors". See Col. 1, lines 18-26.
- "In sharp contrast, a novel electronic marketplace, which we disclose herein, can enable companies to trade capacity anonymously". See Col. 1, lines 29-31.

Chou goes on to discuss his second reason for eliminating negotiation – to reduce the high costs that a negotiated system entails:

• "Another trend that can make the present invention a more attractive alternative to current practices, is driven by technological advances in computer and communications industries". See Col. 1, lines 35-38.

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- "Direct negotiations with competitors ... may result in high search costs". These search costs manifest themselves as the time and expense of obtaining the best price". See Col. 1, lines 52-56.
- "Under the new methodology of the present invention, players' search costs can be significantly lower, because it can eliminate the need to establish one-to-one contact". See Col. 1, lines 56-59.

In short, Chou cites the important drawbacks of negotiated systems and emphasizes the advantages of his no-negotiation, automatic execution system – advantages that derive directly from eliminating negotiation. Thus switching Chou to a negotiated system would go completely against his teachings.

In relation to Chou's teachings on negotiation, the Examiner posited during the interview that Chou only teaches against direct, one-to-one negotiation – not all negotiation. However, this is not true. Chou does not show negotiation of any kind, either between the contraparties or between a contraparty and the deal-making executor. His is a classic automatic execution system, wherein there is no contact between the contraparties and no involvement by the contraparties after they submit their bids and asks. This is amply demonstrated by Chou's disclosure:

- "Deal-making executor 26: The deal-making executor takes all the valid (unexecuted) bids and asks submitted by players and finds feasible matched deals ... outcomes are a set of contracts, which include commodity allocations and prices". See Col. 4, lines 7-12 and Figure 3.
- "Deal device 28: The device receives information on deals executed from the deal-making executor. This device informs buyers and sellers if their bids and asks respectively were executed". See Col. 4, lines 13-16 and Figure 3.

As can be seen, Chou's deal-making executor simply matches up the submitted bids and asks, and executes the trade. Chou's deal-making device then informs the contraparties that their requested trade was executed. Thus Chou eliminates all negotiation, not just direct negotiation.

Further, even if Chou only taught against direct negotiation, that is exactly what the proposed modification would introduce. In the proposed combination, the contraparties themselves resolve any remaining issues and consummate the transaction. Automatic execution is eliminated. Indeed, that is precisely what Silverman '082 is all about.

# D. There Is No Motivation to Switch Chou '504 from a No-Negotiation/Automatic Execution System to a Negotiated System.

There are many disadvantages that more than counter any advantage that might be gained from negotiation – e.g., higher costs, lower efficiency, lower speed of execution, fewer transactions/lower throughput, harder to maintain anonymity, etc. And Chou even discusses these disadvantages, as the purpose behind his invention. These disadvantages make the proposed modification hardly obvious.

In short, a negotiation system is certainly not inherently better than an automatic execution system – in fact, as shown above it is inferior in several respects. Switching Chou '504 to a negotiated system would thus not be obvious.

### E. The Above Arguments Are Separately Applicable.

As in Section I, Applicant wishes to point out that any one of the above arguments establishes nonobviousness. In other words, even if the Examiner believes that the proposed modification does not defeat at least one of Chou's purposes, it is still unobvious because it alters the nonegotiation/automatic execution operating principle of Chou, and because Chou explicitly teaches against it.

And if the Examiner believes that no-negotiation/automatic execution is not a basic operating principle of Chou, and that Chou does not teach against negotiated systems, the proposed modification is still unobvious because there is no motivation to combine. Automatic execution and negotiation systems are patentably distinct, and switching Chou to a negotiated system would bring more *disadvantages* than advantages.

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#### III. THE INVENTION BREAKS PREVIOUS PARADIGMS TAUGHT IN THE PRIOR ART

Chou '504, like the Silverman '501 reference applied in the previous Office Action, teaches that negotiated systems by their very nature cannot be completely confidential, and that an automatic execution system is necessary to achieve this complete confidentiality. Silverman '082 also does not teach that negotiated systems can be completely confidential, but instead shows the flip side – a negotiated system without the full confidentiality defined in the claimed invention.

The invention breaks the previous paradigm that negotiated systems cannot be completely confidential, and this further demonstrates that the novel features defined in Claims 52, 62, 105, 115, 148, and 158 are also unobvious. Exhibit 3 in the Appendix attached to this amendment summarizes this important point.

#### IV. CLAIM CHANGES SUGGESTED BY EXAMINER

The Claim 1 preamble language describes "anonymously and confidentially identifying the contraparties". During the interview, the Examiner suggested that this language should be changed because "identifying" connotes a lack of anonymity and confidentiality. Applicant agrees. "Identifying" as used in the preamble does not mean making public who the contraparties are, but rather determining who the contraparties are internally, within the process. But there is a possibility of misinterpretation, and so Applicant has substituted "determining" for "identifying" in Claim 1 wherever reference is made to the contraparties. In other words, the claim now reads "anonymously and confidentially determining the contraparties". Similar changes were made to Claims 18, 35, 51, 78, 94, 121, and 137, which use the same preamble language.

The preamble language in Claim 52 describes "a secure system for facilitating the trading of transferable commodities". During the interview, the Examiner suggested that "facilitating" should be eliminated. Applicant has made the suggested change, and the claim now reads "a secure system for the trading of transferable commodities". Similar changes were made to Claims 62, 105, 115, 148, and 158, which use the same preamble language. It should be noted that the claimed system does have an element of facilitation to it, in that the system does not trade the transferable commodity itself without further input from the contraparties, as an automatic execution system would. Rather, it enables/facilitates the contraparties to consummate the transaction. Therefore, this change should not be taken to mean that the system trades the transferable commodity itself without further input from the contraparties.

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Examiner also suggested that the "adapted" language in Claim 52 should be changed. Applicant has done so, and has substituted alternate language in the three places this term was used. Similar changes were made to Claims 105 and 148, which used "adapted" in the same manner.

With regard to the Examiner's suggestion to remove "substantially" from the claims, Applicant wishes to note that this term is used in only a minor way in the claims. It is not present in any independent claim, and is used in only a very few dependent claims to clarify that the "match message" need not be transmitted absolutely simultaneously to the contraparties. "Substantially" has support as an original claim term, and moreover, is commonly used in patent claims for the same purpose employed here. Further, this term is necessary in order to prevent infringers from trying to get around the claim by transmitting the match message not quite simultaneously but with the same effect. For all these reasons, Applicant has left "substantially" in the claims.

With regard to the Examiner's suggestion to move the limitations of Claim 59 up into Claim 52, Applicant sincerely believes that Claim 52 is allowable over the prior art without the Claim 59 limitations, which after all would narrow Claim 52 significantly and confine the invention to the "active and suspended segment" memory feature. For these reasons, Applicant has elected not to combine Claims 52 and 59 at this time.

Finally, it should be noted that the above claim changes were not made in response to or in consideration of any prior art, but rather to address the Examiner's suggestion to "clean up the claims". Accordingly, Applicant reserves its rights under the Doctrine of Equivalents to the fullest extent possible.

#### IV. MINOR AMENDMENT TO CLAIM 53

Applicant has amended Claim 53 to change "user terminals" to "user locations", in order to ensure consistency in the claim terminology and proper antecedency between this claim and independent Claim 52.

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### IV. DEPENDENT CLAIMS

Finally, because independent claims 1, 18, 35, 51, 52, 62, 78, 94, 105, 115, 121, 137, 148, and 158 now define patentably over the prior art, their respective dependent claims 2-17, 19-34, 36-50, 68-77, 53-61, 63-67, 79-93, 95-104, 106-114, 116-120, 122-136, 138-147, 149-157, and 159-163 also define patentably for the same reasons.

### **INVENTOR INTERVIEW SUMMARY**

Pursuant to MPEP § 2281, Inventor hereby adopts the substance of the 2/15/06 interview noted on the Interview Summary, except for the following:

- 1) The Interview Summary states that Claims 1, 18, and 52 were discussed. While this is correct, it is incomplete because all the independent claims were discussed. The argument shown on Applicant's first set of interview exhibits, and discussed in the interview, applied to all the independent claims (52, 62, 105, 115, 148, and 158) rejected using a proposed combination of Chou '504 and Silverman '082. Similarly, the argument shown on Applicant's second set of interview exhibits applied to all the independent claims (1, 18, 35, 51, 78, 94, 121, and 137) rejected using a proposed combination of Silverman '082 and the Kulkosky article.
- 2) The Interview Summary states that the agreement reached concerning Chou's purpose was the following: "It was agreed that one purpose of the Chou invention was to lower costs by restricting the use of direct, one-to-one negotiations". However, the agreement reached in the interview was somewhat stronger. It was agreed that one purpose of the Chou invention was to lower costs by *eliminating* one-to-one negotiations not just restricting their use. This agreement was reiterated time and again in the interview, and is also shown on Applicant's notes which were shared with the examiners while making the agreement. A copy of the notes is attached to this amendment as Exhibit 4. Moreover, the agreed language was taken directly from Chou: "Under the new methodology of the present invention, players' search costs can be significantly lower, because it can *eliminate* the need to establish one-to-one contact...".

### **CONCLUSION**

For all of the above reasons, Applicant requests reconsideration of the obviousness rejections. Applicant submits that the claims all define patentably over the prior art. Therefore Applicant submits that this application is now in condition for allowance, which action it respectfully solicits.

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Respectfully,

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Certificate of Fax Transmission: I certify that on the date below, this document and referenced attachments, if any, was faxed to the U.S. Patent Office at 571-273-8300.

3 February 2006

John A. Galbreath